Texas Commission on Environmental Quality

Cross-Connection Control Subcommittee

September 7, 2016

Meeting Summary

Announcements **Mr. Richard Bosch**

The meeting commenced at 9:00 am. After introductions by everyone present, comment was requested on the summary o f the previous meeting (June 1, 2016). No comments were provided and a motion was made to adopt the meeting summar y. After the motion was seconded, the vote was unanimous for adoption. The finalized meeting summary will be posted t o the TCEQ web page in the near future.

Licensing Update **Mr. Ismael Parra**

Mr. Ismael Parra, TCEQ Occupational Licensing section, provided an update on the Fiscal Year 2016 numbers of new and renewed license applications for the following:

- Backflow Prevention Assembly Testers (BPAT) – 1,831 total applications received, 597 new licenses issued, exam pass rate 37%, 27 exams administered.*
- Customer Service Inspectors (CSI) – 625 total applications received, 169 new licenses issued, 46% exam pass rate, 416 exams administered.

Mr. Parra provided handouts for BPAT & CSI Exam Pass Rates and Program Activity including the number of new and re newal applications processed.

*In May 2016, the TCEQ began administering the written exam for the Backflow Prevention Assembly Tester aft er several years of development and review by subject matter experts. Therefore, the number of exams reflected r epresents the exams administered from May – August 31, 2016 (end of the fiscal year).

Meeting attendees had the following questions regarding the licensing information provided by Mr. Parra:

- Are the numbers reported the total numbers for the state?

  Response: Yes

- How do the reported numbers compare to the previous year?

  Response: The statistics were similar for FY2015 and FY2016.

- Do the numbers include those testing for the Backflow Prevention Assembly Tester license?

  Response: Yes, BPAT test results are included in the reported figures.

- What percentage of the tests taken were retests?

  Response: Mr. Parra stated that the effect of retesting on the BPAT exam pass rates is not available from the Occ upational Licensing database. The section will manually determine the BPAT exam pass rate for the next CCC Subcommittee meeting.

- What is the waiting period to take the written exam?

Response: The licensing application will be available online on September 9, 2016. The online application (eAp p) is part of an application process requiring preapproval prior to exam registration. Applicants should complete their training and submit their application 6-8 weeks prior to the desired testing date to allo w application and criminal history reviews and notification of any deficiencies. An approval letter wil l be required to register to take a licensing exam as of March 1, 2016.

- Is the TCEQ tracking the parts of the tests where testers are having trouble?

  Response: The TCEQ can analyze each exam question. The analysis will show how many testers are selecting th e correct answer and each of the distracters.

  Applicants who do not pass the exam are notified and provided a failure analysis showing the results by exam category. For example, in the category "Testing and Troubleshooting," the report will show the applicant how many questions were missed out of the total number of questions in the category. T his allows the applicant to focus their test preparation on the particular categories where they were not successful.

Mr. Byron Hardin, Hardin & Associates, noted that the waiting period in the Dallas area is currently 60-90 days for testing at the regional office.

Ms. Linda Saladino, TCEQ Occupational Licensing section, discussed the Customer Service Inspector (CSI) job task anal ysis and the applicable irrigation work experience for CSI licensing consideration. Applicable irrigation experience has to directly relate to the CSI profession. The description of the applicable work experience will need to be more than, "I'm a n irrigator." Specifying designs of irrigation systems, assessing hazards such as On-Site Sewage Facilities, installing the c orrect backflow prevention assembly, visibly inspecting on-site installations of irrigations systems for cross-connections, describing water reuse/water reclaim systems, and the need for backflow prevention are examples of the irrigation experie nce considered by the TCEQ Occupational Licensing Section.

It was noted that there was favorable input from the Irrigation Advisory Council regarding the TCEQ Occupational Licens ing decision to consider some irrigation experience as qualifying to apply for the CSI license.

FMT Success Stories **Mr. Alex Latham**

Mr. Alex Latham, TCEQ Financial, Managerial and Technical Assistance (FMT) Program, provided a presentation on FM T assistance. Mr. Latham discussed FMT issues at three water systems and the services provided by the FMT Program. Mr. Latham noted that the FMT contractors which provide this valuable assistance to water systems are, typically, themsel ves former operators or managers of water systems.

The following questions were asked:

- Is FMT assistance typically provided to a water system based on TCEQ regional investigator referrals related to violations resulting from a Comprehensive Compliance Inspection (CCI)?

  Response: Mr. Latham stated that the initial reasons for requesting FMT assistance are not tracked but, some assi stance is based on the need to resolve violations cited during a CCI.

- Is there another organization that provides something similar to TCEQ FMT assistance?

  Response: No. The Texas Rural Water Association (TRWA) is the only contractor providing FMT assistance at this time, but individuals from any entity can attend FMT training.

- Is FMT assistance always free?

  Response: Yes. FMT assistance is offered free of charge to Texas public water systems.

- Is FMT assistance only made available to small rural systems?

  Response: No. FMT assistance is available to any Texas public water system.

- Will an FMT contractor cite violations?

  Response: There are no violations cited through the FMT Assistance Program. The goal of FMT assistance is education, prevention, and problem solving.

Mr. Byron Hardin, Hardin & Associates, inquired about the turnaround time for providing FMT assistance. Mr. Latham described the different levels of priority used by the FMT Program, with most requests falling under the "Routine" category:

Priority	Turn Around Time
High	Within 1 week
Medium	Within 15 days
Routine	Within 30 days

Mr. Latham also provided the following:

- A DRAFT copy of the Financial, Managerial & Technical Assistance pamphlet.
- TCEQ FMT Assistance Contract Assignment Task List: This is a list of 65 categories of assistance available through the FMT Assistance Program.

During this discussion, training availability for TCEQ Regional PWS Investigators was also discussed. The next available training for investigators is June 2017. Questions regarding this training can be directed to Ms. Melissa Keller, TCEQ Operations Support Team, at melissa.keller@tceq.texas.gov or (512)239-1768. This training for TCEQ investigators will potentially include the Level 2 Assessment training created by Ms. Alicia Diehl, contractor TCEQ Response and Capacity Development. Level 2 Assessment training is part of the implementation of the Revised Total Coliform Rule (RTCR).

Falsification of Test Reports **Mr. Byron Hardin**

Mr. Byron Hardin, Hardin & Associates, led the discussion on falsification of test reports. Observations were made that falsification of BPAT T&M reports is challenging to enforce upon due to the need to gather detailed evidence and build a case to act upon the tester's license. The discussion included tips on how municipalities can take an active role in with enforcement actions by adopting an ordinance with a penalty clause for falsifying documentation.

During this discussion, revoking a tester's license based on falsification of documents was addressed. Emphasis was placed on enforcement at the local level as the first step in creating a document trail. The following points were made during the discussion:

- Local jurisdictions may face resource challenges (knowledge, personnel, time) to accurately review documentation properly.
- Most lax BPAT tester behavior can be corrected with a phone call.
- The general consensus was that only a small percentage of testers are non-compliant and local Ordinances are a very important tool needed to help correct the problem.
- Mr. Hardin noted that non-compliant testers that are prohibited from working in a water system's service area can simply move from one public water system to another.
- Jerry Lewis, Sundance Irrigation, made the observation that some return students for backflow testing courses do show signs of failing to recognize required details in properly filling out the Backflow Prevention Assembly Test

& Maintenance report. Mr. Lewis stressed accountability and oversight at the local level as part of the solution.

- Mr. Al Fuentes, TCEQ Cross-Connection Control Program, noted that enforcement has been a Subcommittee topic in the past and local enforcement has always been a very good option for water systems.
- The San Antonio Water System uses an inspector / tester registry.
  Note: Having a registry creates an opportunity to set requirements, identify the requirements to the inspector/test er, and identify penalties for non-compliance. As stated previously, this must be supported in the local ordinance.

- Ms. Melissa Keller noted that it can be challenging to gather enough material for an enforcement action and that enforcement relies heavily on having a paper trail.
- Mr. Hardin suggested that local ordinances need to have a 2 part approach: enforcement and an appeal process. The ordinances need to state what actions can result in enforcement at the local level.

A suggestion was made for a Regulatory Guidance (RG) document to be drafted to provide enforcement guidance at the lo cal level. Mr. Fuentes suggested that the Cross-Connection Control Program could work with the Occupational Licensing Program to create a list of items that, if committed, would warrant an investigation and potential enforcement action. Ms. Keller also noted that a criminal referral is an option for addressing falsification. She stated that if a list of enforceable cit ations and necessary evidence can be created, the list can be incorporated into the TCEQ Regional investigator training.
A valuable tool pointed out by Ms. Keller were complaint and compliance histories currently available on the TCEQ webs ite. Supporting information is included with each history. The following steps can be used to access complaint and compl iance histories on-line:

1. Navigate to https://www.tceq.texas.gov/
2. In the Search By: section on the far left side of the screen, click on the **Name/Company(customer)** link.
3. When Name/**Company(customer)** is clicked, the **Central Registry Query – Customer Search** screen appears.
4. In the **Customer Name:** box, enter the name of a license holder. The form will accept full names or part of a name, such as a last name.
5. Click the **SEARCH** button.
6. The **Central Registry Query – Customer Results List** appears.
7. After locating the **Customer Name**, click on the **CN Number** link.
8. The **Central Registry Query – Customer Information** screen appears.
9. Click on the **RN Number** link.
10. The **Central Registry Query – Regulated Entity Information** screen appears.
11. Scroll down to the **Permits, Registration, or Other Author**izations section and click on **ID Number** link for the **ID Type** license to view details.
12. The **Central Registry** screen appears. Under the **Related Information:** section appears information for the following categories:

Commissioners' Actions	Correspondence Tracking	Effective Enforcement Orders
Criminal Convictions	Proposed Enforcement Orders	Complaints
Discharges	Emergency Response Events	Emission Events
Fish Kills	Other Incidents	Investigations
Periodic Reports		

13. If related information is not available, the following statement will be present, followed by the categories for which no information is available:

    There is no information related to this License in the following categories:

14. If related information is available, the category appears as a **BLUE** link under the **Related Information:** title.

Click on the category name to view the information.

Documentation Verification **Mr. Richard Bosch**

Mr. Richard Bosch gave a presentation on document traceability and led the discussion on the importance of traceability a nd legal defensibility to a cross-connection control program. Traceability is the ability to demonstrate a "paper trail" whic h supports a piece of information. For example, if a public water system were questioned as to how they know that the ga uge tested for accuracy date on a backflow prevention assembly test report is correct. The water system could show a cop y of the certificate issued when the tester's gauges were tested for accuracy which confirms the date on the form.

Mr. Bosch noted that during cross-connection control program surveys, conducted by TCEQ Central Office staff, the wate r systems had some difficulty demonstrating this "paper trail." Secondary documents, like copies of test gauge certificates or copies of the tester's license, while not required, can be beneficial in that they can support the Cross-Connection Contr ol Program records when questions arise and especially during a backflow event. It is also very important that they should not be used as a substitute for an official TCEQ document. For example a certificate of occupancy is not a substitute for a CSI certificate.

The following points were made during the discussion:

- When following record retention regulations, discarding unique and official documents after the retention time has been met, can be detrimental to a program. If discarding a document creates a gap in documentation, it may be better to keep the document to have proof that a regulatory requirement has been met and demonstrates that the water system has knowledge of what is occurring at a site.
- Mr. Al Fuentes, TCEQ Cross-Connection Control Program, noted the issue of defensibility. For example, in order to defend actions related to a backflow event, the documents related to the incident need to exist. A CSI certificate and a backflow prevention assembly report will show that the water system was aware of the hazard, required the appropriate backflow prevention assembly, and the assembly was working correctly when it was tested.
- Mr. Bosch noted that hazards documented on follow-up CSIs at the same address should generally match from CSI to CSI and that recently identified hazards or any hazards that have been eliminated should be readily identifiable by reviewing CSI documentation.
- Letters sent to customers are also valuable forms of documentation. The letters document the details regarding customer notification and attempts in obtaining compliance with backflow/cross-connection control requirements.

How to use the TCEQ Webpage **Mr. Richard Bosch**

Mr. Richard Bosch presented a list of 31 items of all TCEQ cross-connection control related links and websites. The list was presented and is available so that those interested could have an efficient method of accessing TCEQ cross-connectio n control related websites. Some non-TCEQ webpages were also included. For a copy of the list, please contact the TCE Q Cross-Connection Control Program by phone at (512)239-4691 or by email at Richard.Bosch@tceq.texas.gov.

Intro of Updated Regulatory Guidance Document No. 478 (RG-478) **Mr. Chirag Patel**

Mr. Chirag Patel presented the updated version of RG-478 to the Subcommittee. Mr. Patel covered significant changes to the document and informed the Subcommittee that the new version of RG-478 had been posted on the TCEQ website and can be located at: https://www.tceq.texas.gov/assets/public/permitting/watersupply/groups/ccc/rg-478.pdf

Updates to the BPAT / CSI Forms **Mr. Richard Bosch**

Mr. Richard Bosch presented the latest updates to the BPAT and CSI forms to the Subcommittee. Changes on both forms were presented which should make the form more understandable and capture more information. The Subcommittee prov ided more comments on recommended changes which will be reviewed and potentially incorporated into the forms.

Public Education Brainstorming **Mr. Richard Bosch**

Mr. Richard Bosch presented cross-connection control public education videos and pamphlets. Mr. Bosch noted that there is a lack of public education information that is directed towards the general public and that the cross-connection control industry would benefit from educational outreach that explains the importance of backflow & cross-connection in simple terms that are easily understood by the general public. A public education video was viewed by the Subcommittee. This subject will be further explored for potential development of educational materials for the general public.

Irrigation System Position Statement **Mr. Jerry Lewis**

Mr. Jerry Lewis, Sundance Irrigation, gave a presentation on the classification of landscape irrigation systems. Mr. Lewis submitted a plan for the Subcommittee to develop a position statement which supported reclassifying all irrigation systems as health hazards and a phased approach to statewide implementation of the change. Mr. John DeCell, VEPO, provided comment in support of this initiative. The intent of the recommendation is to align the State of Texas rules regarding irrigation systems with national standards and plumbing codes.

After some internal meetings to discuss this, the following determination was made:

> *The TCEQ Cross-Connection Control Subcommittee **cannot support** a position which is in conflict with current regulations. Individuals or a group of individuals are always allowed to request time on the Drinking Water Advisory Workgroup agenda or another TCEQ meeting agenda to make a proposal for a position statement.*
>
> *We recommend that any proposal for a position statement on this topic be supported by a fiscal impact study. The study should detail the expected impact to citizens of the state and local cross-connection control programs. Supporting information should also include standards for irrigation systems from national organizations, case studies, and statistics.*

In addition, Mr. Lewis also gave a presentation on why atmospheric vacuum breakers (AVBs) should not be used on irrigation systems. Mr. Lewis performed a demonstration where sprinkler heads with built in check valves compromise the AVB. Sprinkler heads with built in check valves can only be verified by physically removing and inspecting the heads. As per Title 30 Chapter **§344.50(b)(4)(B)** of the Texas Administrative Code**,** no shutoff valves can be installed downstream from an atmospheric vacuum breaker. An AVB will not function properly with a shut-off valve downstream.

Hose Bibb Vacuum Breaker (HBVB) at RV Parks **Mr. Al Fuentes**

Mr. Al Fuentes led the discussion on the use of HBVBs at RV parks. The Subcommittee discussed that HBVBs will not function correctly under constant pressure which is the case when connected to an RV. The group also agreed that pressure vacuum breakers (PVBs) are not suitable due to constant back pressure which would allow backflow and contamination of the potable water supply.

The following was discussed:

- Selection of Assemblies from RG-478:
  RPs, PVBs, and SVBs are testable assemblies while AVBs are not testable. Thus, RPs, PVBs and SVB's are the most suitable method to prevent backflow from a health hazard and are preferable to AVBs in almost every situation.

- The following information was obtained from the ***DRAFT*** (Should not be cited) version of RG-206 titled, "Customer Service Inspections; A Guide for Public Water Systems:"

  How can a water supplier protect against backflow at a recreational vehicle (RV) park?
  - *Perform periodic CSIs of RV parks that are within their service area to determine that the backflow preventers have not been compromised and no new cross-connection have been made;*

- *Educate managers of RV parks about blackwater tank flushing devices and the contamination threat they pose;*
- *Discourage the use of "Y Hose Adapters" which enable an RV owner to establish a crossconnection from a potable water supply of the RV Park and the potable water system of the RV to the blackwater and graywater tanks.*

- The group agreed that RPBAs should be installed at RV dump stations.

Texas State Board of Plumbing Examiners (TSBPE) Clarification__ Mr. Richard Bosch

An issue was raised by Mr. Richard Bosch during a recent presentation by Mr. Byron Hardin, Hardin & Associates, at the 2016 TCEQ Public Drinking Water Conference. During his presentation, Mr. Hardin made the point that a plumbing insp ector, licensed by the TSBPE, could only conduct CSIs, as allowed by TCEQ's CSI regulation, in his service area.

During this discussion it was clarified that although the TCEQ CSI regulation does **not** limit where a licensed plumbing in spector can perform CSIs, it does require the plumbing inspector to have a current license. TSBPE rules (verified by Mr. Richard Bosch by phone call to the TSBPE) specify that a plumbing inspector's license is current **only** when employed an d limits him to the service area(s) of his employer(s). Therefore, if he were to conduct a CSI outside his service area, he w ould not be considered licensed and therefore not in compliance with TCEQ's CSI regulation which invalidates the inspec tion.